

REMARKS

Applicant respectfully requests reconsideration in view of the foregoing amendments and the following remarks. Applicant has endeavored to respond to each of the issues raised by the Examiner so as to advance the prosecution of the application to allowance. The various grounds of rejection are traversed.

The amendments to claim 1 are supported throughout the as-filed specification. Claims 5 and 6 are maintained as originally filed.

The Examiner has rejected claim 1 under 35 USC § 112, second paragraph, for indefiniteness. This rejection is traversed.

It is respectfully submitted that the language referred to, namely, "the velocity of the calcinations process, the decarbonization grade of the batch and the formation of the desired crystalline structures" does not require any antecedent basis since it is in the nature of "whereby" type language to indicate the benefits to be realized by the adding of 5 to 25% by weight of cullet to the raw materials prior to calcination. Furthermore, this language has appeared in claim 1 since it was filed without being rejected. Withdrawal of the rejection is respectfully requested.

The title has been amended to more clearly set forth the nature of the invention.

It is respectfully submitted that claim 1 as amended serves to overcome the rejection of claims 1 and 5 and 6 under 35 USC § 103 (a) as being unpatentable over Szczesniewski et al. (US 6,358,870 B1) in view of Bair (U.S. Patent No. 2,220,750).

The Examiner, in support of his position, notes that the application relates to a process of making glass, at least in the Abstract and the Title, wherein the phrase "the production of glass formulas" (corresponding to a process of making glass) is employed. Furthermore, the Examiner also states that the applicant argues that the intended use of a glass cullet is as a heat transfer agent, rather than a fluxing agent, and suggests that the combination of Szczesniewski and Bair discloses the adding of cullet to a batch of raw materials, and the calcining process which does not form a liquid phase acts inherently as a heat transfer agent during the calcining process.

In raising these two (2) arguments, yet again, the Examiner continues to rely on the teaching of Bair despite Applicant's argument in his previous Amendment that the claimed invention is not for "making glass", but for making "**synthetic silicates**". Applicant's statement in the Abstract and in the Title that the synthetic silicates can later be used as an ingredient for the making of glass, cannot be interpreted as claiming a process for making glass, because the synthetic silicates prepared by the claimed process cannot by themselves be used for making a specific commercial glass.

The Examiner also *erroneously suggests* that Bair's patent discusses a calcining process which does not form a liquid phase. This, quite simply, is not disclosed in Bair, and the Examiner is clearly in error. Bair's statement regarding drying the briquettes does not mean he is taking them to a temperature of 850°C in order to degasify them, nor is he implying that the use of the cullet is for the explicit purpose of permitting heat penetration into the briquettes.

The Bair reference discloses **complete glass formulas** and the analysis of any phase diagram will demonstrate that by combining the raw materials in the proportions that are required for making glass will point to a eutectic that will create **a liquid phase at temperatures much lower than the stated 850°C**, which are required to create the synthetic silicates of the present invention. Thus, Bair's briquettes can never be "degasified" and the cullet was never included for the explicit purpose of permitting heat penetration into the briquettes, but to save raw material and energy costs in the process of "melting and making glass". Based on the foregoing analysis of Bair's teaching, it is readily apparent that Bair has absolutely no bearing or any relationship whatsoever to the claimed invention, and there would be no motivation for one of ordinary skill in the art to even consider it as a suitable secondary reference to ameliorate the deficiencies of the primary Szczesniewski reference.

The claimed invention clearly distinguishes over the combination of Szczesniewski and Bair since Applicant's claim recites the addition of cullet which significantly improves the speed of degasification over that disclosed in the Szczesniewski reference, and the Bair reference, quite simply, is non-analogous art and is not properly combinable with Szczesniewski.

In the claimed invention, the use of glass cullet provides a means to increase the efficiency of the heat transfer process to the interior of a pellet and thus create oxides which can readily combine with the sand to form synthetic silicates. In the claimed method the glass cullet is never used to promote fusing and it never melts. Its presence in the claimed method has nothing to do with its use in the art of glassmaking. In the claimed method the presence of glass cullet helps to markedly increase the speed of reaction in the creation of the synthetic silicate, as compared to not using the cullet as disclosed by Szczesniewski.

In view of these arguments, it can be seen that there are differences between the processes used for creating synthetic silicates that can be later used as more efficient raw materials in the glass melting process. **The process claimed herein is directed solely to creating synthetic silicates and not to the melting of glass.** The cullet recited in the claimed process is never used as a fluxing agent, nor as a cost saving element, but as a mechanism that transfers heat to the core of the pellet which has been created to produce the desired synthetic silicates, based on a solid-solid reaction of the raw materials that are being handled.

In conclusion, the method for preparing the pre-reacted synthetic batches of amended claim 1 and dependent original claims 5 and 6 are unobvious over the combination of prior art employed by the Examiner, since an unobvious sequence of steps are employed, which are neither taught nor suggested by the art. Since the claims distinguish over the art, withdrawal of the rejection is solicited since a *prima facie* case has not been established by the Examiner by a preponderance of the evidence.

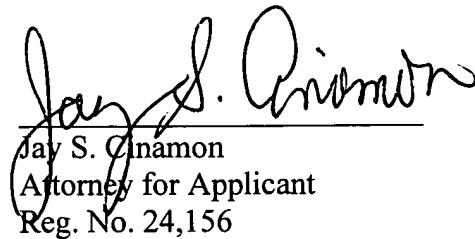
The issuance of a Notice of Allowance is respectfully solicited.

Please charge any fees which may be due and which have not been submitted
herewith to our Deposit Account No. 01-0035.

Respectfully submitted,

ABELMAN, FRAYNE & SCHWAB
Attorneys for Applicant

By



Jay S. Cinnamon
Attorney for Applicant
Reg. No. 24,156

666 Third Avenue
New York, NY 10017-5621
Tel.: (212) 949-9022
Fax: (212) 949-9190